WHAT IS CLAIMED IS:

1. An isolated binding agent that competes with a monoclonal antibody MAb 292-2-3 for specific binding to human cytochrome P450 allelic variant 2C9*2 wthout specifically binding to human cytochrome 2C9*1 and 2C9*3, and that specifically inhibits 2C-catalyzed metabolism of phenanthrene by at least 50%.

2. The binding agent of claim 1 that lacks specific binding to each of human cytochromes P450 1A1, 1A2, 2A6, 2B6, 2C8, 2C18, 2C19, 2D6, 2E1, 3A4, and 3A5.

3. The binding agent of claim 1 that specifically inhibits the enzyme activity of human cytochrome P450 allelic variant 2C9*2 by at least 90%.

4. The binding agent of claim 1 that is MAb 292-2-3 or a binding fragment thereof.

5. The binding agent of claim 1 that is a monoclonal antibody.

6. The monoclonal antibody of claim 5 that is a Fab fragment.

7. The monoclonal antibody of claim 5 that is a mouse antibody.

8. A cell line producing the monoclonal antibody of claim 5.

9. The cell line of claim 8 that is a eucaryotic cell line.

10. The cell line of claim 9 that is a procaryotic cell line.

11. The monoclonal antibody of claim 5 comprising a light chain variable domain having at least 80% sequence identity with the light chain variable domain of a monoclonal antibody MAb 292-2-3 and a heavy chain variable domain having at least 80% sequence identity with the heavy chain variable domain of the monoclonal antibody MAb 292-2-3.

12. The monoclonal antibody of claim 5, wherein the light chain variable domain comprises three CDR regions from the light chain of a monoclonal

antibody MAb 292-2-3, and the heavy chain variable domain comprises three CDR regions from the heavy chain of the monoclonal antibody MAb 292-2-3.

13. An isolated binding agent that competes with a monoclonal antibody MAb 763-15-5 for specific binding to the human cytochrome p450 2C9 allelic variants 2C9*1, 2C9*2, and 2C9*3, and that specifically inhibits 2C-catalyzed metabolism of phenanthrene by at least 50%.

14. The binding agent of claim 13 that lacks specific binding to each of human cytochromes P450 1A1, 1A2, 2A6, 2B6, 2C9, 2C18, 2C19, 2D6, 2E1, 3A4, and 3A5.

15. The binding agent of claim 13 that specifically inhibits the enzyme activity of human cytochrome P450 allelic variant 2C9*2 by at least 90%.

16. The binding agent of claim 13 that is MAb 292-2-3 or a binding fragment thereof.

17. The binding agent of claim 13 that is a monoclonal antibody.

18. The monoclonal antibody of claim 17 that is a Fab fragment.

19. The monoclonal antibody of claim 17 that is a mouse antibody.

20. A cell line producing the monoclonal antibody of claim 17.

21. The cell line of claim 20 that is a eucaryotic cell line.

22. The cell line of claim 21 that is a procaryotic cell line.

23. The monoclonal antibody of claim 17 comprising a light chain variable domain having at least 80% sequence identity with the light chain variable domain of a monoclonal antibody MAb 763-15-5 and a heavy chain variable domain having at least 80% sequence identity with the heavy chain variable domain of the monoclonal antibody MAb 763-15-5.

24. The monoclonal antibody of claim 17, wherein the light chain variable domain comprises three CDR regions from the light chain of a monoclonal

antibody MAb 763-15-5, and the heavy chain variable domain comprises three CDR regions from the heavy chain of the monoclonal antibody MAb 763-15-5.

25. The binding agent of claim 13 that specifically inhibits the enzyme activity of human cytochrome P450 allelic variants 2C9*1 and 2C9*3 by at least 70%.

26. The binding agent of claim 13 that specifically inhibits the enzyme activity of human cytochrome P450 2C18 by 30%.

27. An isolated binding agent that competes with a monoclonal antibody MAb 763-15-20 for specific binding to the human cytochrome P450 2C9 allelic variants 2C9*1, 2C9*2, and 2C9*3.

28. An isolated binding agent that competes with a monoclonal antibody selected from the group consisting of MAb 5-1-5 and MAb 281-1-1 for specific binding to human cytochrome P450 2C8, and that specifically inhibits 2C-catalyzed metabolism of phenanthrene by at least 50%.

29. The binding agent of claim 28 that lacks specific binding to each of human cytochromes P450 1A1, 1A2, 2A6, 2B6, 2C9, 2C18, 2C19, 2D6, 2E1, 3A4, and 3A5.

30. The binding agent of claim 28 that specifically inhibits the enzyme activity of human cytochrome p450 2C8 by at least 90%.

31. The binding agent of claim 28 that is MAb 5-1-5 or a binding fragment thereof.

32. The binding agent of claim 28 that is MAb 281-1-1 or a binding fragment thereof.

33. The binding agent of claim 28 that is a monoclonal antibody.

34. The monoclonal antibody of claim 33 that is a Fab fragment.

35. The monoclonal antibody of claim 33 that is a mouse antibody.

36. A cell line producing the monoclonal antibody of claim 33.

37. The cell line of claim 36 that is a eucaryotic cell line.

38. The cell line of claim 37 that is a procaryotic cell line.

39. The monoclonal antibody of claim 33 comprising a light chain variable domain having at least 80% sequence identity with the light chain variable domain of a monoclonal antibody selected from the group consisting of MAb 5-1-5 and MAb 281-1-1, and a heavy chain variable domain having at least 80% sequence identity with the heavy chain variable domain of a monoclonal antibody selected from the group.

40. The monoclonal antibody of claim 33, wherein the light chain variable domain comprises three CDR regions from the light chain of a monoclonal antibody selected from the group, and the heavy chain variable domain comprises three CDR regions from the heavy chain of a monoclonal antibody selected from the group.

41. An isolated binding agent that competes with a monoclonal antibody MAb 592-2-5 for specific binding to human cytochrome P450 2C9 and 2C18, and that specifically inhibits 2C-catalyzed metabolism of phenanthrene by at least 50%.

42. The binding agent of claim 41 that specifically inhibits the enzyme activity of human cytochrome p450 2C9 by at least 80%.

43. The binding agent of claim 41 that specifically inhibits the enzyme activity of human cytochrome P450 2C18 by at least 80%.

44. The binding agent of claim 41 that is MAb 592-2-5 or a binding fragment thereof.

45. The binding agent of claim 41 that is a monoclonal antibody.

46. The monoclonal antibody of claim 45 that is a Fab fragment.

47. The monoclonal antibody of claim 45 that is a mouse antibody.

48. A cell line producing the monoclonal antibody of claim 45.

49. The cell line of claim 48 that is a eucaryotic cell line.

50. The cell line of claim 48 that is a procaryotic cell line.

51. The monoclonal antibody of claim 45 comprising a light chain variable domain having at least 80% sequence identity with the light chain variable domain of a monoclonal antibody MAb 592-2-5 and a heavy chain variable domain having at least 80% sequence identity with the heavy chain variable domain of the monoclonal antibody MAb 592-2-5.

52. The monoclonal antibody of claim 45, wherein the light chain variable domain comprises three CDR regions from the light chain of a monoclonal antibody MAb 592-2-5 and the heavy chain variable domain comprises three CDR regions from the heavy chain of the monoclonal antibody MAb 592-2-5.

53. An isolated binding agent that competes with a monoclonal antibody MAb 5-7-5 for specific binding to a human cytochrome p450 2C family member selected from the group consisting of 2C9, 2C18, and 2C19, and that specifically inhibits 2C-catalyzed metabolism of phenanthrene by at least 50%.

54. The binding agent of claim 53 that lacks specific binding to each of human cytochromes P450 1A1, 1A2, 2A6, 2B6, 2C8, 2D6, 2E1, 3A4, and 3A5.

55. The binding agent of claim 53 that specifically inhibits the enzyme activity of human cytochrome p450 2C9 by at least 90%.

56. The binding agent of claim 53 that specifically inhibits the enzyme activity of human cytochrome p450 2C18 by at least 90%.

57. The binding agent of claim 53 that specifically inhibits the enzyme activity of human cytochrome p450 2C19 by at least 90%.

58. The binding agent of claim 53 that is a monoclonal antibody.

59. The monoclonal antibody of claim 58 that is a Fab fragment.

60. The monoclonal antibody of claim 59 that is a mouse antibody.

61. The binding agent of claim 53 that is MAb 5-7-5 or a binding fragment thereof.

62. A cell line producing the monoclonal antibody of claim 58.

63. The cell line of claim 62 that is a eucaryotic cell line.

64. The cell line of claim 62 that is a procaryotic cell line.

65. The monoclonal antibody of claim 58 comprising a light chain variable domain having at least 80% sequence identity with the light chain variable domain of a monoclonal antibody MAb 5-7-5 and a heavy chain variable domain having at least 80% sequence identity with the heavy chain variable domain of the monoclonal antibody MAb 5-7-5.

66. The monoclonal antibody of claim 58, wherein the light chain variable domain comprises three CDR regions from the light chain of a monoclonal antibody MAb 5-7-5 and the heavy chain variable domain comprises three CDR regions from the heavy chain of the monoclonal antibody MAb 5-7-5.

67. A method of determining whether cytochrome P450 2C9*2 metabolizes a compound, comprising:

contacting the compound with cytochrome P450 2C9*2 in the presence of varying amounts of the binding agent of claim 1; and

assaying metabolism of the compound as a function of amount of binding agent, a decrease of metabolism with amount of binding agent indicating that cytochrome P450 2C9*2 metabolizes the compound.

68. The method of claim 67, wherein the compound is contacted with cytochrome P450 2C9*2 in a sample containing a collection of cytochrome P450 enzymes including 2C9*2.

69. The method of claim 68, wherein the sample is a tissue sample.

70. The method of claim 69, wherein the collection of enzymes are obtained from a cell culture expressing the enzymes.

71. The method of claim 70, wherein the compound is a drug, steroid or carcinogen.

72. A method of detecting cytochrome P450 2C9*2, comprising:

contacting a sample suspected of containing cytochrome P450 2C9*2 with a binding agent of claim 1; and

determining whether the agent specifically binds to the sample, specific binding indicating the presence of cytochrome P450 2C9*2 in the sample.

73. A method of measuring P450 2C9*2 levels in an individual relative to P450 2C9*2 levels in a control population, the method comprising:

contacting a sample suspected of containing cytochrome P450 2C9*2 from the individual with a binding agent of claim 1, and

determining the P450 2C9*2 levels in the individual relative to P450 2C9*2 a mean level in a control population.